SAN FRANCISCO BAY AREA
TRANSIT-ORIENTED DEVELOPMENT STUDY



TASK 2: REVIEW OF EXISTING TRANSIT-ORIENTED DEVELOPMENT POLICIES

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METROPOLITAN TRANSPORTATION COMMISSION

Prepared for MTC by:
Reconnecting America's Center for Transit-Oriented Development and
Parsons Brinckerhoff

For more information contact:
MTC Project Manager - Valerie Knepper at:
vknepper@mtc.ca.gov or (510) 464-7821

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I. INTRODUCTION

As part of the Center for Transit-Oriented Development Team, Parsons Brinckerhoff was retained to bring a national understanding of best practices to the San Francisco Bay region on the question "*what is the state-of-the-practice in linking land use to transportation investment decisions?"*

Many aspects of the relationship between land use and transportation are well understood. We know, for example, a certain amount about the effect population and employment density have on travel behavior, and what happens to land use when a transportation investment is made. However, going the next step and applying the land use-transportation relationship as an explicit part of the decision-making for major transportation investments is still an emerging field.

This paper takes a look at three types of approaches from around the United States where transportation investments decisions have been linked to land use. The most basic approaches are those where transportation dollars are being invested in land use planning to realize long-term changes in land use that are supportive of the desired transportation system. At a more targeted level, there is an emerging set of approaches where the allocation of transportation funds are tied to an evaluation of the performance of existing and proposed land use patterns. The most direct approaches are those where an anticipatory decision was made to condition a specific transportation investment on binding commitments to change land use in a manner supportive of the transportation investment.

Finally, the paper reaches a series of broad conclusions that warrant consideration as MTC contemplates the next steps in its transit oriented development (TOD) strategy.

II. ENCOURAGING LAND USE CHANGES FOR TRANSPORTATION PURPOSES

The first approach reviewed in this paper reviews programs that provide a set of incentives and financial support to communities wishing to integrate transportation and land use planning for the purposes of place-making and reducing automobile trips. In these programs public agencies have invested in funding for local land use planning to help create a framework where transportation improvements and land use plans are better integrated; examples are provided from:

- The San Francisco Bay Area- Metropolitan Transportation Commission's (MTC) Transportation for Livable Communities (TLC) program;

- Atlanta, Georgia - Atlanta Regional Commission (ARC)'s Livable Centers Initiative (LCI); and
- Chicago, Illinois - Regional Transportation Authority (RTA)'s Regional Technical Assistance Program (RTAP).

In all of these cases, the programs fund both planning activities and construction of improvements consistent with those planning activities. There is an emphasis on involving the public in decision-making and taking steps to create places that have the physical attributes that support walking trips, compact development and civic vitality.

MTC'S TRANSPORTATION FOR LIVABLE COMMUNITIES PROGRAM

In 1998, MTC launched the Transportation for Livable Communities (TLC) program. The purpose of the TLC program is to support community-based transportation projects throughout the nine Bay Area counties that bring new vibrancy to downtown areas, commercial cores, neighborhoods, and transit corridors, enhancing their amenities and ambiance, making them places where people want to live, work and visit. TLC provides funding for projects that are developed through an inclusive community planning effort, provide for a range of transportation choices, and support connectivity between transportation investments and land uses.

Initially, the program provided planning grants, technical assistance and capital grants to help cities and nonprofit agencies in order to develop transportation-related projects fitting the TLC profile. Recently the Commission has approved a tripling of the program funding to $27 million per year, and strengthened the role of the county level transportation agencies in selecting and ensuring delivery of the projects. The TLC capital program has in recent years started to place a stronger emphasis on TLC projects that support adjacent land use objectives like infill development.

The TLC initiative now has three main components:

1. TLC Capital Grants
2. TLC Planning Grants
3. Housing Incentive Program

The TLC program was expanded to include a Housing Incentive Program (HIP) in 2000. HIP was modeled after a similar program started by the San Mateo County City/County Association of Governments in 1999, awarding transportation grants to local jurisdictions in conjunction with housing built near transit stations and corridors. Grants are awarded to a jurisdiction once housing has been proposed but before a permit has been approved for the development, and grants are delivered based on actual construction of the housing. The size, density and affordability of the housing projects determine the size of the grant.

TLC capital grants are an excellent example of directing transportation dollars to support smaller-scale capital projects that can help promote transportation choices as well as support land use changes in the form of infill housing and transit-oriented development. The HIP program is unique in awarding transportation dollars explicitly on the basis of land use decisions by local governments and actual construction as a *quid pro quo* for new housing near transit stations and corridors.

ATLANTA LIVABLE COMMUNITIES INITIATIVE

The Atlanta Regional Commission (ARC) Board adopted policies in the Regional Transportation Plan (RTP) in May 1999 to provide funding for investment studies and transportation projects located in activity and town centers in the region. This program of studies and projects is known as the Livable Centers Initiative (LCI). The focus of the program is to encourage increased residential development, mixed-uses and connectivity in activity and town centers. The studies also define detailed plans that support the adopted policies of the Regional Development Plan (RDP) to encourage activity and town center development.[i]

LCI provides $1 million per year for five years of seed money to communities that are working to enhance livability and mobility for their residents. LCI has been funding about 10 projects per year; the average size of a planning grant to local governments has been approximately $75,000. To support these planning studies, ARC also has $350 million available for implementation for the more innovative ideas generated from these plans. The funds are awarded on a competitive basis to local governments and non-profit sponsors, such as Transportation Management Associations (TMAs), for producing plans to define future center development strategies and supporting public and private investments. ARC has funded fifty-one planning studies over the five years of the LCI program (2000 to 2004).

The LCI program has been in existence long enough that many of the original planning studies are now starting to bear fruit as development projects. For example, after a notable absence of housing projects at the Metropolitan Atlanta Rapid Transit Authority (MARTA) stations, LCI projects have been successful in helping leverage new housing development at some MARTA stations.

The LCI program mirrors, in many ways, MTC's Transportation for Livable Communities (TLC) program, which also offers both planning and capital improvement grants on a competitive basis.

CHICAGO RTA'S REGIONAL TECHNICAL ASSISTANCE PROGRAM

Similar to the LCI program in Atlanta, the Regional Transportation Authority (RTA) in Chicago has developed a Regional Technical Assistance Program

(RTAP) to help cities develop station area plans and conduct public outreach associated with TOD planning for existing and future station areas. Since 1999 when the program began, RTAP has programmed $6.4 million for various projects including TOD, intelligent transportation systems, countywide transit studies, and transit corridor studies ($1.8 million has been programmed for TOD projects). RTAP also sponsors research, publications and workshops to publicize TOD throughout the Chicago region[ii].

According to John DeLaurentis, RTA Planning Manager, RTA aspires to use the RTAP program to gradually strengthen the link between new transportation investments and local land use actions.

RTA has completed 13 TOD studies, three of which were "pre-RTAP", and several studies are in progress. In Tinley Park, RTA participated in TOD studies of two station areas. At the Oak Park Avenue Station, the study emphasized historic preservation and infill redevelopment, and recommendations included building improvements, historic signage, new mixed uses, and enhanced pedestrian circulation. For the 80th Avenue station, recommendations included a new station house with retail uses, improved local bike and auto access, burying utilities, and new residential development near the station. In both cases these recommendations are generally being followed. In Elmhurst, extensive zoning changes were made, and pedestrian, auto, and transit access was improved. Other TOD studies have been completed for Blue Island, Westmont, Olympia Fields, Orland Park, Waukegan, Riverdale, Evanston, Robbins, Hazel Crest, Morton Grove and University Park.

More recently, the Village of La Grange has applied for RTAP funds to complement its Illinois Tomorrow funding to promote business and TOD development along the Burlington Northern Santa Fe (BNSF) railroad corridor. In this case, RTAP is assisting by trying to package and manage the two studies simultaneously. Illinois Tomorrow funds are being used in Brookfield to update the city's comprehensive plan. At the same time, the city, which has no planning staff, is trying to promote TOD in portions of its three Metra station areas. In this case, the village will manage all planning efforts, while RTA through RTAP will provide significant TOD technical expertise.

Like the LCI program, RTAP is very similar in nature to MTC's TLC program.

ARLINGTON COUNTY, VIRGINIA'S TOD INITIATIVE

This county-based transit-oriented redevelopment initiative has been undertaken over three decades in a low-density commercial corridor in suburban Arlington County, Virginia, just outside Washington D.C.[iii] The government of Arlington County became an early proponent of TOD as a strategy that could be used to retrofit the three-mile-long corridor, the Rosslyn-Ballston Corridor – a commercial center that has never been incorporated as a city – in order to reverse

significant declines in both population and retail sales. Once consensus on the redevelopment plan was reached with all stakeholders, the County established and then refined a consistent and supportive policy framework over the next 30 years – creating a stability and predictability that engendered trust in the community and among developers. As a result, there has been little controversy over proposed projects and the corridor has remained a magnet for development, even during recessions and despite the fact that developers are required to pay for significant improvements to public infrastructure as a condition of site plan approval.

The sheer amount of mixed-use development that has occurred is noteworthy, and the corridor has become as densely populated as the most densely populated city centers in the United States. There has been a net increase of more than 15 million square feet of commercial space (offices, hotels and retail) and 9,139 housing units, and an 81 percent increase in the assessed value of land and improvements. Vacancy rates are lower than everywhere in the region except for the District of Columbia, and rents are higher. Because this development has been channeled into an area with well-defined boundaries, surrounding low-density single-family neighborhoods have been preserved. If all the development in the two-square-mile corridor area were constructed instead on vacant suburban land at standard densities, it would cover more than 14 square miles.

Most remarkable of all is the fact that this development has generated only modest levels of additional traffic. Transit ridership in the corridor is higher than in any jurisdiction in the region other than the District of Columbia, and most transit users get to the stations on foot or by bus – there is little commuter parking in the corridor. There are some outstanding issues that need to be resolved in order to ensure the corridor's long-term success – including affordability, aesthetics, the cohesiveness of the retail environment, and coordination of station area plans with countywide policies. But by most measures, Arlington County's redevelopment initiative has surpassed goals and expectations.

Four levels of planning were undertaken in the corridor.

- First, a basic policy framework for redevelopment was established. Similar to a Comprehensive General Plan map and policies, this framework called for placing intensive mixed-use development within a quarter-mile of the Metro stations and protecting the single-family neighborhoods on either side of the transit corridor.

- Second, sector plans were created for station areas to provide guidance on land use, urban design, streetscape, public facilities, transportation and other infrastructure. County staff led these planning efforts with substantial input from residents. Each station area sector plan was done separately and then adopted by the County Board. The first round of plans was completed by 1984 and sector plan addenda have been

produced for several stations.

- A third level of planning has been focused on specific functional aspects of the corridor such as affordable housing, retail development, parking policy, and pedestrian and bicycle access and safety. An ongoing challenge is the coordination of station-focused sector plans with corridor-wide planning initiatives.

- The fourth level of planning is the site plan review and approval process, where many of the site-specific decisions get made. The Planning Commission's Site Plan Review Subcommittee, which informs this process, includes staff from the County's Planning, Economic Development and Public Works Departments, representatives from other citizen commissions and civic associations, property owners, and other interested citizens.

Developers have played a major role in pushing the envelope of development in the corridor. There are two options available when developers propose projects. Those that are consistent with existing low-density zoning regulations can be approved through an administrative process. But if developers want to negotiate for the higher densities that are permitted in the County's General Land Use Plan, they can file for a site plan review and participate in a structured set of negotiations with the staff, citizen commissions and the community over the project's design and community benefits. The densities allowed in the General Land Use Plan are so much higher than the densities permitted for by-right development in the zoning ordinance that there is a tremendous incentive for developers to participate in the site review process. As a result of these negotiations, developers typically agree to pay for significant improvements to public infrastructure. The list of improvements that have been tied to approval of individual projects includes undergrounding utilities, the redesign and signalization of intersections, and the provision of sidewalks, crosswalks, street trees, street lighting, and other amenities. The County Board reviews and approves all site plan submissions.

Given the tremendous success Arlington County has had in the Rosslyn-Ballston Corridor, it could serve as a model for the Bay Area, and in particular, a model of decision-making and policy-setting for maturing suburban communities. MTC has discussed the notion of financially supporting Station Area Planning, and this aspect of this case study might be a model to consider emulating. Note, however, that the institutional structure may be quite different than the Bay Area, in that this stretch of the corridor does not include incorporated cities, whereas MTC's transit expansion corridors traverse incorporated cities.

III. LEVERAGING LAND USE CHANGES FOR TRANSPORTATION PURPOSES

Transportation and land use professionals widely understand and accept that land use can have a profound impact on the cost-effectiveness of a transportation investment. At the same time it is rare for policy makers to take the step of explicitly conditioning the approval of a transportation investment on having land use plans and policies in place to guide development to occur in a manner which supports and reinforces the transportation investment. This section profiles a handful of "best practice" projects where a transportation investment decision was directly conditioned on having appropriate land use plans and policies in place to help assure the long-term success of the proposed transportation project.

The programs profiled in this section include:

- The Federal Transit Administration's New Starts Land Use Criteria;
- BART's System Expansion Policy;
- Portland's Westside Light Rail;
- The State of Maryland's Priority Funding Areas Act; and
- State highway programs in Oregon and Washington.

FEDERAL NEW STARTS LAND USE CRITERIA

The Federal Transit Administration's (FTA) New Starts Land Use Criteria is the most notable example at the national level of linking transportation investment decisions to land use conditions, plans and policies.

Each year the Secretary of Transportation submits the *Annual Report on New Starts* to Congress as a collateral document to the budget submitted by the President. The report documents the Department's recommendations for allocating the funds of the so-called New Starts program. Since FY 1999, FTA has rated the overall transit-supportive land use of each project as "high," "medium-high," "medium," "low-medium," or "low" based on information provide by project sponsors.[iv]

Land use is one of three factors FTA uses in rating projects. The other two factors are the User Benefit calculation (essentially travel time savings for new and future riders divided by capital cost) and the strength of the local financial commitment. For a project to advance it needs at least a combined rating of "medium."

The federal government estimates there are over $48 billion in New Starts projects in the "funnel" competing for $22 billion in funding with another 120+ projects considering pursuing New Starts funding. At current funding levels it has been estimated that it would take 50 years to fund all the projects in the New Starts pipeline. Federal policy gives special consideration to land use in funding decisions for New Starts. In today's environment, where over a hundred projects

are chasing a limited amount of federal dollars, the implications of a "low-medium" rating on FTA's land use criteria can be significant. Under the current FTA rating system, land use can play a very large role in determining a project's overall rating and which projects are recommended to Congress for federal funding.

According to Ron Fisher, one of the FTA staff in charge of the program "Land use is a critical part of the [overall] rating. Sometimes half of the [overall] rating could come down to land use. It's a reflection of the importance we place on transit-oriented development." [v]

The FTA process has interesting implications for the Bay Area. Under the FTA process, making the transit land use connection is not a requirement or a precondition to receiving New Starts funding. At the same time, given the tremendous level of competition for limited federal funding, the special consideration FTA gives to land use in determining which projects to recommend for funding achieves close to the same result. As a practical matter most potential grantees view the criteria as a federal requirement, not an option.

Federal Evaluation of Land Use and Transit

In evaluating the land use potential for a successful New Start transit project, FTA applies its transit-supportive land use measurement factors on a sliding scale. The closer the project is to moving into construction, the higher the standard. In other words, the standards become more exacting as the project moves toward readiness.

Consequentially, it is critical to tailor the level of planning to the status of the transit project and the planning philosophy of the community. The federal process recognizes that as a transit project progresses through project development and gets closer to implementation, the level of detail and commitment to TOD planning should also be further developed.

FTA New Start Thresholds
Existing Land Use

Rating	Average Population Density (Persons per Square Mile)	Employment Served with No Transfer
High	> 15	> 250
Medium-High	10-15	175-250
Medium	6.67-10	125-175
Low-Medium	3.33-6.67	75-125
Low	<3.33	< 75

Numbers in Thousands

The constant factor for each phase is the rating for existing land use – a combination of population and employment density, existing station area development character, existing station area pedestrian facilities, including

access for persons with disabilities, and existing station area parking supply. The thresholds for population and employment levels are summarized in the accompanying table.

A helpful framework for understanding the level of TOD planning appropriate to each phase of a transit project is to look at what the FTA expects in its rating of transit projects for funding. These land use evaluation factors are:

1. Existing Land Use
2. Growth Management Programs
3. Transit-Supportive Corridor Policies
4. Supportive Zoning Near Transit Stations
5. Tools to Implement Land Use Policies
6. Performance of Land Use Policies
7. Potential Impact of Transit Investment on Regional Land Use

The following table summarizes what FTA is seeking in order for a project to get a high land use rating.[vi] For projects seeking to have the most competitive New Starts rating it also serves as a useful guide for what level of planning is needed by when.

FTA NEW STARTS LAND USE RATING **Expected Performance of Plans & Policies for a High Rating**	
By the end of Preliminary Engineering	Corridor & station area conceptual plans have been developed
	TOD zoning recommendations prepared for individual stations
	Transit agency is proactively working with local governments & developers
	Transit-supportive development is occurring in corridor
By the end of Final Design	Station area plans adopted by local governments
	TOD zoning adopted by local governments
	Joint development program and appropriate financial tools in place
	A number of TOD development proposals in station areas

POSSIBLE REVISIONS TO FTA'S LAND USE CRITERIA

In December 2003 the FTA sought the advice of an Urban Land Institute Advisory Panel on how existing New Starts Land Use Criteria could be revised to increase its effectiveness.[vii] The panel made three key points that bear consideration as MTC looks at how it might link land use and transportation:

FTA / ULI New Starts Panel

Recommendations for Weighting Land Use

- 20 points: Existing Land Use (from 33 points)
- 65 points: Plans & Policies (from 33 points)
  - Regional 10 points
  - Corridor 15 points
  - Zoning 20 points
  - Incentives 20 points
- 15 points: Performance (from 33 points)

1. Raise the bar, encourage "high" ratings

In the FTA's rating system, existing land use is worth one-third of the land use rating. This posed two problems. First, heavily weighting existing land use tends to double count it since existing land use is also a major factor in the ridership part of FTA's user benefits calculation. Second, the weighting reduces the incentive to change land use policies to encourage transit-friendly land use patterns. If the land use criteria are intended to help leverage changes to local land use plans the weighting needs to reflect that.

The panel recommended changing the weighting of land use to place the greatest emphasis on plans and policies in order to encourage early consideration of land use patterns in new transit projects. See the accompanying table.

2. Get land use considerations incorporated into the process earlier

Under the FTA process land use does not enter into the process until a technology and an alignment have been chosen at the end of the Alternatives Analysis process and a project sponsor is applying to enter into preliminary engineering. The panel recommended that land use be explicitly addressed at the systems planning / corridor analysis phase. Their rationale was twofold. First, the earlier land use is addressed in the process of planning for transportation investments the better the likely outcome. Second, if land use were elevated to become a pass/fail criteria in later phases, it would be important to address it early and often.

3. Develop a threshold or pass/fail criteria

In the New Starts process FTA has pass/fail criteria for both the user benefit calculation (it must be under $25) and for the strength of the local financial plan. The panel felt strongly that land use should be subject to the same level of rigor.

The panel recommended the following framework as land use pass/fail criteria:

ULI Panel Recommended Land Use Thresholds

- Late P.E.
  - Jurisdictional IGAs / MOUs covering 50% corridor population
    - *PASS/FAIL test*
- Final Design
  - Adopt interim or final codes
    - *PASS/FAIL test*
- Full Funding Grant Agreement (FFGA)
  - Adopt final codes before FFGA approval
    - *PASS/FAIL test*

a) Because land use ultimately rests with local governments, the panel wanted "proof" local governments were engaged in the project. By the end of PE project sponsor would need to negotiate intergovernmental agreements (IGAs) or memorandums of understandings (MOUs) laying out how transit and land use would be integrated with jurisdictions representing at least 50% of the corridor population.

b) As a precondition to entering final design, interim or final transit-friendly zoning would need to be adopted.

c) As a precondition to receiving a commitment for federal capital funding (a Full Funding Grant Agreement), station area plans and supporting codes would need to be adopted.[viii]

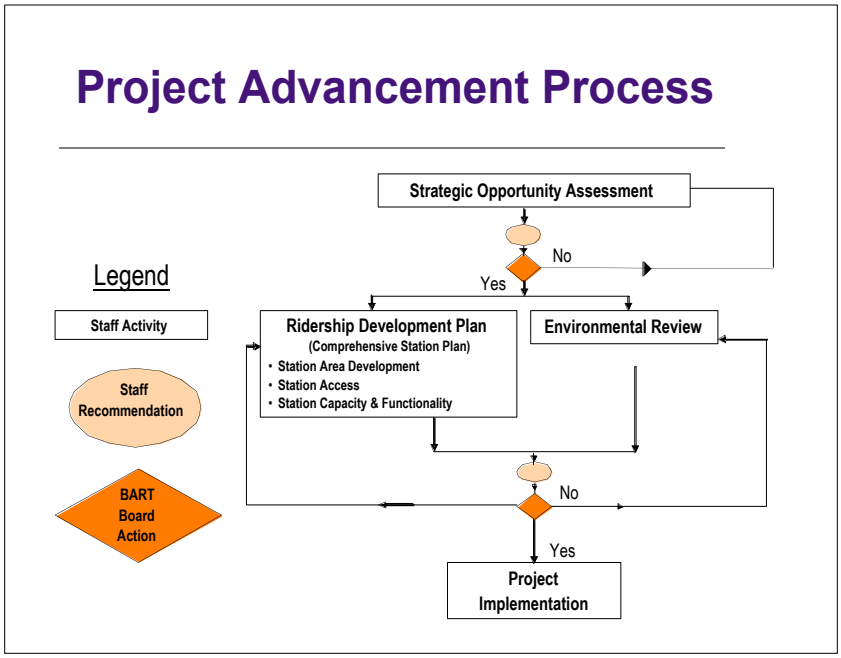
BART System Expansion Policy

An emerging example of linking transportation investment decisions to land use is the San Francisco Bay Area Rapid Transit District (BART) "Policy Framework for System Expansion." The policy was adopted by the BART board in 1999 and is unique among transit agencies in the United States. BART staff is currently applying the policy in eastern Contra Costa County as part of the proposed eBART project.

According to BART staff, perhaps the most significant element of the System Expansion Policy is how it has begun to change the dynamics of the conversation between BART and local jurisdictions. The policy has been an effective tool in helping local governments see the transportation implications of their land use actions and how they are an important partner in the success of a new transit project.

The BART policy provides a clearly defined two stage "project advancement process"[ix] (see chart) for how projects are screened and can advance through the process. At the first stage, BART staff relies on an initial planning assessment of a transit expansion project and evaluates the proposed project against their

criteria and decides whether to recommend a project to the BART Board for advancement to the next stage. Once the project advances to stage 2, BART staff will work in partnership with local jurisdictions to develop a Memorandum of Understanding (MOU) laying out coordinated timelines for the environmental review of the proposed project and the "Ridership Development Plan" process.



The Ridership Development Plan process appears to constitute the essential element of the system expansion project advancement process. At this stage BART would enter into a partnership with local jurisdictions to achieve transit ridership thresholds by balancing TOD with community desires. In the MOU, BART would be seeking local jurisdictional commitments to adopt transit-friendly General Plans and/or Specific Plans with sufficient levels of density to make the project cost-effective.

The BART policy draws much of its framework from early versions of the FTA New Starts evaluation. Like the FTA process, projects are evaluated on a series of "metrics" and rated on a 5-point scale: "high," "medium-high," "medium," "low-medium," or "low."

BART Existing Land Use Thresholds

Rating	Gross Residential Density Per Acre w/in 1/2-mile	Estimated Trips with 30% Mode Share
• High	>25	>9,000
• Medium-High	15-24	5,401-9,000
• Medium	10-14	3,601-5,400
• Low-Medium	5-9	1,801-3,600
• Low	<5	<1,800

BART evaluates and rates current land use conditions around proposed transit stations, as shown on the accompanying table. To rate future conditions, BART evaluates ridership. Ridership targets are addressed through ridership development plans. There are no BART ratings for future land use development or densities as such – though such development may be necessary on a practical

level in order to meet the ridership thresholds. Ridership can be developed through either access (e.g., roads and parking) or local land use development.

The BART metrics are:

- transit-supportive land use and access
- ridership development plan
- cost-effectiveness
- regional network connectivity
- system and financial capacity
- partnerships

The BART System Expansion Policy process has yet to be played out completely with a project, so it is premature to rate the effectiveness of the tool. It is also important to remember the process in its current configuration was designed to apply to the urban edge of the Bay Area; how it might work in more built up areas remains an open question. At the same time, the process raises some interesting questions that have implications for MTC as it looks at linking transportation investments to land use:

- What is the logical trigger point to seek a binding commitment on land use from local jurisdictions? Given the nature of the transportation decision-making process is a single or a series of trigger points warranted?
- If a local jurisdiction takes binding actions to significantly increase density, what assurances do they have that BART will be able to commit to implement the proposed transportation project?
- What constitutes a "binding action" by a local jurisdiction, given that future city councils can reverse decisions regarding general plans amendments and zoning? How can multiple local jurisdictions cooperate in making commitments along a corridor?
- In focusing so heavily on density and cost do the BART metrics miss "place making" factors such as parking and mix of uses that can have large impacts on both community fit and ridership?
- If one of MTC's goals is to consider the full range of transportation expenditures and impacts (e.g. construction of additional freeway access to BART, streets and road maintenance, as well as community vitality and air quality impacts), how can this tool effectively be used?

PORTLAND'S WESTSIDE LIGHT RAIL

One of the more high profile examples of explicitly linking the funding of a major transit investment to changes in land use is Portland's Westside MAX Light Rail project. The Portland region's commitment to integrating transportation and land use ultimately made the critical difference in getting a Full Funding Grant Agreement from FTA for the six-mile extension of the Westside project to Hillsboro.

The Westside project was originally planned as part of a broader strategy to shape growth. Unlike the Portland's first line, a substantial amount of land around the Westside was vacant and prime for development. As Newsweek put it in May 1995, Portland is "building transit first, literally in fields, in the hope development will follow." All told, in 1994 there were approximately 1,500 acres of vacant developable land in the vicinity of Westside stations.

To help assure development around the stations occurred in a transit-friendly manner, TriMet persuaded local governments to undertake station area planning. The $4 million Westside station community planning program was funded out of TriMet general funds, regional funds, and state flexible federal Surface Transportation Program funds. In exchange for accepting the funds, local governments agreed to participate in the broad-based planning program, to share information, and to adopt transit-supportive zoning for each station area on an agreed-upon schedule. The station area plans addressed a variety of issues relevant to building in the areas around the Westside stations, including market demand for desired future uses, allowable interim uses, maximum parking standards, and the timeframe for development and delivery of necessary infrastructure. In September 1998, when the 18-mile, $965.5 million Westside MAX opened for service, legally binding station area plans had been adopted by 3 of the 4 jurisdictions (the cities of Portland and Hillsboro, and Washington County) for the areas within 1/2 mile of the platform.

The Office of Management and Budget (OMB) originally recommended against funding the project because the project was not deemed to be cost-effective using traditional measures. Ultimately, USDOT was successful in arguing that if the land use benefits of the Hillsboro extension were included in the benefits equation the project would be cost-effective.

The Full Funding Grant Agreement that TriMet signed with FTA in January 1995 for the Hillsboro extension explicitly linked funding to land use. In the agreement the parties "recognize that the success of the Hillsboro extension will depend, in large measure, on local implementation and enforcement of long term urban containment policies that lead to transit-supportive land use patterns in the corridor." In the agreement TriMet promised "… to take any and all actions, within its powers, as may to reasonable and necessary to ensure local adoption of amendments to comprehensive plans and implementing ordinances of all cognizant jurisdictions in the vicinity of the Hillsboro extension …"[x] The actions called out in the agreement included the enactment of and local compliance with Metro's Region 2040 concept plan, adoption of local station area plans that positively impact ridership, and adoption of policies to meet Oregon's State Transportation Planning Rule.

With the reward comes responsibility – the agreement included language requiring Tri-Met to review performance for a period no less than five years following the opening of the Hillsboro extension. If local governments don't

produce the committed-to land use actions, including both zoning and development progress, TriMet is responsible to refund the federal government $75 million.[xi]

STATE OF MARYLAND PRIORITY FUNDING AREAS ACT

In 1997, under the leadership of then Governor Parris Glendening, the State of Maryland enacted the Priority Funding Areas Act, which geographically focuses the State's investment in growth-related infrastructure. Priority Funding Areas are locations where the State and local governments target their efforts to encourage and support economic development and new growth. These areas include:

- Municipalities;
- Baltimore City;
- Areas inside the Baltimore and Washington Beltways;
- Neighborhoods designated for revitalization by the Department of Housing and Community Development ("Designated Neighborhoods");
- Enterprise and Empowerment Zones; and
- Certified Heritage Areas within county-designated growth areas.

Counties work with the state to identify Priority Funding Areas in coordination with local comprehensive plans. Counties may designate areas as Priority Funding Areas if they meet guidelines for intended use, availability of plans for sewer and water systems, and permitted residential density. Areas eligible for county designation include existing communities and areas where industrial or other economic development is desired. Counties may also designate areas planned for new residential communities that will be served by water and sewer systems and meet density standards. While the statutes are too course to direct radical changes in local land use patterns, it is an example of attaching land use requirements (in cooperation with local land use authorities) to funding.

Funding controlled by the statutes includes a broad range of support from development assistance to roads, but does not explicitly include transit investment. By coordinating investment into these targeted areas, the State's economic assistance to local municipalities does not act as an accomplice to sprawl. From the State's perspective, the result is a more efficient and responsible use of public funds.

At the same time, Governor Glendening also established a State Office of Smart Growth. While the cabinet-level office would not override the authority of the other state departments such as the Department of Transportation, it backed the State's Smart Growth rhetoric with leadership and clout. The Office also helped to bring in and support the expertise within state-level departments. Under the new gubernatorial administration, the Office of Smart Growth has been integrated into the State Office of Planning. In this and other departments the legacy of leadership that the Office of Smart Growth helped to engender remains,

advancing arrangements, if not policies, that encourage transit-supportive land use.

BYPASS & INTERCHANGE MANAGEMENT

Some state Departments of Transportation (DOTs) have been acting to limit the negative land use impacts of new highway investments. State highway programs in Oregon, Washington, and Maryland (discussed above) seek to limit land use changes resulting from new highway investments. States are also pursuing access management plans (limiting and consolidating curb cuts) as a means to preserve and enhance capacity on existing facilities.

DUNDEE BYPASS – OREGON 99W

A new highway bypass is currently being planned to redirect traffic from Highway 99W - through Newberg, Dundee and Dayton - to an 11-mile route southeast of the highway. The new facility will run primarily through undeveloped farmland. Studies show that a bypass is needed to address increasing traffic congestion on Oregon 99W (OR 99 is a primary route connecting the Portland area to several Pacific coast recreation areas). Although a Preferred Alternative has been selected, the corridor concept is still fairly general. The Preferred Alternatives includes a four-lane bypass "expressway" (as defined by the Oregon Highway Plan), bike routes, express bus lanes, and tools to manage traffic flow (tolls have been proposed). Access to the bypass will be restricted to interchanges. Major access points have been identified, but engineers have not designed the roadway, interchanges or other features.

In order to build the facility, the Oregon Department of Transportation (ODOT) will need to acquire farmland in Yamhill County and seek zoning and comprehensive plan changes in the three cities and the county. Protecting farmland is one of Oregon's Statewide Land Use Goals, and because the bypass will directly impact farmland, ODOT is required to formally apply for a land-use goal exception (this was done in March, 2004). Goal exceptions are needed for the whole facility, including the two terminal interchanges, and also the East Dayton interchange, which is outside of the Dayton urban growth boundary (UGB).

The goal exception process also requires mitigation to protect farmland from new development. Specific land use actions are required in each phase of project development. Initially, an Intergovernmental Agreement (IGA) between ODOT and the local jurisdictions requires the cities and counties to adopt policies to not allow zone changes or UGB expansions towards the new corridor until designs are completed and an Interchange Area Management Plan (IAAMP) is in place. Some specific elements of the IGA and future IAAMP include:

1) Provide no private access to the new bypass highway. Provide access to the new highway only at agreed upon public interchanges or intersections.

2) Use the interchange management plans to ensure that planned land uses near each new interchange are:
   a) Consistent with the function of the bypass to serve through traffic, and
   b) Can be adequately supported by the planned transportation improvements (per Oregon Highway Plan standards).
3) Newberg, Dundee, Dayton and Yamhill County will adopt comprehensive plan policies and zoning amendments to exclude retail commercial development and highway-oriented development at proposed access points.
4) Encourage mixed-use communities.
5) For downtown Newberg and Dundee, encourage the following:
   a) Increased density of development.
   b) Adequate off-street parking and truck loading areas.
   c) Other measures that strengthen commerce in the downtown core.
6) Encourage urban development to stay inside existing urban growth boundaries and discourage expansion of urban growth boundaries.
7) Discourage large-scale retail zoning outside of Newberg's and Dundee's central business districts.
8) Use permits and fees to support local transportation improvements required by land development.

Oregon Administrative Rule (OAR) 734-051-0200(4) states that "An Interchange Area Management Plan (IAAMP) is required for any new interchange or for significant modifications to an existing interchange." Oregon Highway Plan (OHP) Policy 3C, Interchange Access Management Areas (IAMA), further clarifies that it is the policy of the State of Oregon to plan for and manage grade-separated interchange areas to ensure safe and efficient operation between connecting roadways. An IAAMP is required prior to making any significant modifications to facilities.

An IAAMP is a plan for a defined Interchange Management Area that combines access management techniques to maximize the operation of the interchange, with an analysis of planned land uses. The land use component of the study is intended to assure that the capacity of the interchange will not be exceeded for the extent of the planning period due to trips generated by local land use development. IAAMP's address several goals, including:

- Safeguarding state and local investment in transportation improvements by ensuring the long-term function of the new or improved facility;
- Guiding development to where it is planned for, and protecting areas for which it is not; and
- Including facilities for multimodal transportation (to reduce auto reliance) as appropriate.

WSDOT INTERCHANGE MANAGEMENT

In Washington State, WSDOT adheres to interchange access management policies similar to Oregon. For a new interchange at 219th Street (SR 502) and I-5, a Preferred Alternative has been selected, and preliminary design is proceeding in conjunction with the federal approval process. On the transportation side, WSDOT has prohibited any new access within a 1/2-mile of the project, in order to protect traffic flows. On the land use side, Clark County agreed to change its growth management plan to prohibit urban development near the interchange (i.e., by placing constraints on where nearby Urban Growth Areas (UGA's) can expand). The interchange is located in a rural location, and both the state and county want to ensure that the interchange does not trigger adjacent development (e.g., gas stations, convenience stores, big box retail, "sprawling" residential development). The county has further agreed that if re-zonings do occur in the future (even if no UGA is expanded), that new development must mitigate all potential impacts to the new interchange.

IV. CONDITIONING PROJECT FUNDING ON LAND USE ACTIVITIES

The final set of profiles cover a variety of examples where the allocation of funding for specific transportation infrastructure is tied to the delivery of projects that are expected to provide substantial ridership to the new system and/or financial support for the cost of delivering the transit infrastructure. The examples are from:

- Santa Clara County, CA - the Valley Transportation Authority;
- New York City; and
- The Portland, Oregon region.

The Portland examples include both a unique regional program to participate in the funding of TOD real estate projects and two new rail projects where the transportation land use connection played out in the projects' funding packages.

VTA COMMUNITY DESIGN & TRANSPORTATION PROGRAM

In 2002 the Santa Clara Valley Transportation Authority (VTA) adopted the Community Design and Transportation (CDT) Program as its primary program to integrate transportation and land use. The CDT program set out to aid the implementation of transit-supportive development that would broaden and strengthen the range of viable transportation choices in the region while making the most efficient use of transportation and other resources in the county.

VTA collaborated with its member agencies, the cities and county of Santa Clara, to develop the goals, and later asked each municipality to formally adopt the principles and best practices identified in the CDT program into planning, public works, and redevelopment projects, and in project development, review, and

approval processes. VTA drafted a model resolution for cities establishing a minimum level of commitment to the CDT program and its principles.

While thus far the agency has not enforced the arrangement, the program and the best practices manual that was designed to support it has helped to make the requirements for access, pedestrian-friendly urban design, and transit-supportive land use programming explicitly clear to developers and to the cities that partner with developers. Following this work, several cities have amended their zoning codes and regulations to include provisions for transit supportive land uses at existing and planned rail stations.

CDT Program requirements are explicitly attached to each of these funding sources: CDT planning and capital grants, the local streets and county roads program, and the bicycle program. In addition, VTA is exploring ways to condition its transportation investments based on cities' commitment to urban design and land use planning principles that support those investments. For example, if redevelopment of an area were predicated on improved transit access and reduced parking, VTA may look for the cities and agencies involved to meet its CDT principles before making an investment in transportation to serve that area. In essence, the endorsement of the CDT program and Best Practices manual provides a policy framework for linking the funding of transportation improvements on supportive land use activities.

VTA expects to see increasing commitment to the CDT Program as staff, developers and agencies become more familiar with the objectives and requirements of the program.

NEW YORK NUMBER 7 LINE

The proposed extension of the No. 7 Subway Line to the Westside of Midtown Manhattan has been explicitly linked to the rezoning of the areas around the stations. Without the rezoning the project will not proceed. The No. 7 Subway Line project also includes the expansion of the Jacob Javits Convention Center and construction of a new "Multi-Use Facility" that could be used both for major sports and entertainment uses (e.g., as the new home of the New York Jets) and as an adjunct to the Convention Center. Provisions are incorporated in the proposed rezoning requiring easements within anticipated development for subway station entrances. Much of the new development will be constructed in air rights over a major MTA rail yard, an Empire Line rail cut, and entrances to the Lincoln Tunnel. Details of the project will be available as part of the project DEIS, which is expected to be available from the New York City Department of City Planning in Summer 2004.

PORTLAND METRO TOD IMPLEMENTATION PROGRAM

To help stimulate the construction of "transit villages", Portland's regional government, Metro, operates an innovative TOD Implementation Program using federal transportation funds. The TOD Program operates through a series of cooperative agreements between Metro and local jurisdictions, and utilizes Development Agreements with private developers. The primary use of TOD Program funds is site acquisition. Operating with two full-time staff, the program has been directly involved in the funding of 12 different TOD projects with a level of involvement ranging from $50,000 to $2,000,000 in site control and direct financial participation in TODs. Another Portland program is the CMAQ TOD Program run by the Portland Development Commission. The program was funded with $3.5 million in CMAQ funds to acquire land, and design and construct transit amenities as part of TODs. A total of nine projects have received funding.

According to Metro's Marc Guichard,[xvi] "real estate development economics often make the dense mixed-use TODs sought in local plans infeasible in much of the region. A development rule of thumb is buildings should be constructed over parking and uses should be stacked when land is more expensive than a parking structure. In the Portland region, this rarely occurs if market dynamics are generating land values less than $50 to $60 per square foot. In fact, parcels near most of the transit stations in the region, outside downtown Portland, generate land values of only $6 to $10 per square foot."

"Metro's TOD Program pushes the development envelope by using public-private partnership techniques to secure more TOD-like projects than would otherwise be developed on a given site. For example, on a site where the market would likely produce three-story apartments with surface parking and no retail, the TOD Program would push for five-stories with podium parking and ground floor retail that may have four to five times more dwelling units and induce significantly more transit ridership."

Property is acquired, re-parceled and planned, then sold with conditions to private developers for constructing TOD and/or dedicated to local governments for streets, plazas, and other public facilities where appropriate. In many cases the land value is reduced to cover the high development costs required to construct a specific TOD project. In such cases, a "highest and best transit use" appraisal is used to establish the sale price.

The program is the first of its kind in the United States to use flexible federal transportation funds for TOD implementation and has been instrumental in helping re-shape the joint development policies of the Federal Transit Administration.

PORTLAND STREETCAR

The creation of the Pearl District is the most dramatic transformation of downtown Portland in the last 20 years. An important part of the story behind the creation of the "The Pearl" is an innovative agreement explicitly linking land use density to the financing and construction of a modern new streetcar line.[xvii]

The Pearl District encompasses 90 city blocks bounded by I-405 to the west, West Burnside St. to the south, NW Broadway St. to the east, and the Willamette River to the north. Once home to a large artist community and an "incubator" for start-up businesses in abandoned warehouses, the Pearl District is now an emerging mixed-use neighborhood of upscale loft housing, parks, art galleries, boutiques, cafes, and restaurants.

A major key to the transformation of the district was the construction of the Portland Streetcar, the first modern streetcar to be constructed in the United States. The Streetcar began service in 2001 and runs 2.4 miles through downtown Portland and the heart of the Pearl District. The Streetcar connects the Pearl District to downtown employment, the cultural/arts district, Portland State University, and other upscale neighborhoods. Ridership is over 5,000 daily passengers. Most of the route is in a fareless zone.

Portland Streetcar Funding

$28.5m Parking Bonds (50%)
$9.6m Local Improvement District (17%)
$5m FTA Funds for Local Improvements (9%)
$7.5m Tax Increment Financing (13%)
$0.5m U.S. HUD (1%)
$2.4m City of Portland (4%)
$0.85m Sale Leaseback (1%)
$56.9 million total

The Streetcar investment was strategically used to leverage large-scale redevelopment of a functionally obsolete warehouse and industrial district, and brownfields formerly owned by Burlington Northern Railway. In this case, the Streetcar has been both a housing and transportation project, as streetcar construction was explicitly linked to high-density development via an innovative developer agreement. As a result of this agreement, the average density of the district is now 120 housing units per acre, the highest in the entire city. The Pearl District had only a handful of residents in 1990 and 1,300 in 2000. At build-out, it will be home to over 10,000 residents in 5,500 housing units, and 21,000 jobs. The area will also have 1 million square feet of new commercial and retail space.

The essential elements of the Master Development Agreement (1997), between the City and Hoyt Street Properties (the owners of 40 acres of contaminated rail yards in the heart of the district) are:

1. **Housing**: The housing density requirements are significantly greater than anything built previously. The developer agreed to increase the minimum density from 15 to 87 units per acre when the City commenced removal of the Lovejoy Viaduct that crossed the abandoned rail yards. Second, upon completion of the Portland Streetcar, minimum densities would increase to 109 units/acre. Finally, when construction commenced on the District's first park, density would increase to 131 units/acre.

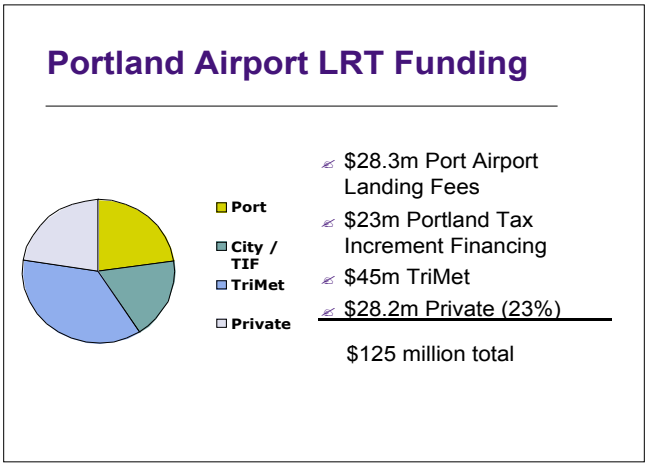
   In addition to meeting density requirements, the developer is also to help meet the City's housing affordability goals. At least 15 percent of all rental units and 10 percent of all for-sale units must be 700 square feet or smaller. At least 15% of the total housing units must be affordable to families earning up to 50% of the area's median family income (MFI), and 20% of units must be affordable up to 80% MFI. The developer's commitment is predicated on the availability of public financial assistance, recognizing that these units typically require public subsidies. If the developer does not build affordable housing, the City can purchase up to three one-half blocks of property for that purpose.

2. **Parks**: The developer agreed to donate 1.5 acres of land for new parks in exchange for the City's commitment to build them. In addition, the City has the option to acquire up to four acres for public open space.

3. **Infrastructure**: Transportation improvements were essential to develop the area. The agreement stipulates that the developer would donate the right of way for all local streets, sidewalks and utilities (six acres) at no cost. The developer also paid $121,000 to remove the Lovejoy Viaduct, and $700,000 towards the streetcar.

PORTLAND AIRPORT MAX

The linkage of a transportation and land use can also result in helping to finance transit improvements. TOD was a central feature in the financing of TriMet's Airport light rail line. Light rail to the Portland International Airport (PDX) had been part of regional and PDX master planning since the mid-1980s. The conceptual alignment to the terminal utilized the median of Interstate 205 (I-205), which had been built and reserved for a future transitway.



In 1997, Bechtel Enterprises approached Portland officials and offered to help extend the region's light rail system (MAX) to PDX years ahead of schedule in exchange for development rights to 120 acres at the entrance to the airport. After approval by a Public Review Committee in 1998, Bechtel contributed $28.2 million toward the $125 million light rail project. In return, Bechtel, in partnership with Trammell Crow, is to develop a 120-acre TOD at the entrance to the airport. Bechtel received a long-term leasehold (85 years + 14-year option) on the property, which will be developed as "CascadeStation".

Airport MAX construction began in June 1999, and CascadeStation infrastructure improvements were built in the fall of that year. Airport MAX opened in September 2001. The 5.5-mile MAX (Red Line) extension runs north from Gateway Transit Center along I-205 to the Portland International Airport terminal. Service runs every 15 minutes between 5 a.m. and 11:30 p.m., and no transfers are necessary between PDX and downtown Portland. Low-floor cars allow passengers to easily roll luggage onboard, and quick drop 15-minute parking spaces located at Red Line stations make drop-off or pick-up of passengers and their luggage easy.

At buildout, CascadeStation is proposed to be an attractive, high-density and transit-oriented development with hotels, conference facility, restaurants, retail, entertainment and office space anchored by two rail station plazas, CascadeStation and Mt Hood Avenue Station. The proposal emphasizes a pedestrian-friendly park block environment with open spaces and views of Mt. Hood. Full build-out is expected to take 15 years, and create 10,000 new jobs. To date no development has occurred since the line opened. A soft economy and the events of 9-11 are cited as reasons for the delay in development.

V. IMPLICATIONS FOR THE BAY AREA

The examples profiled here show there is a growing body of experience nationally in explicitly linking transportation investments to supportive land use policies and programs. These examples tend to be the exception, not the rule. Never the less, they provide some interesting questions and implications for MTC and the Bay Area:

- This paper outlines a broad range of strategies for conditioning the allocation of transit funds on supportive land use patterns. However, in only a few cases is there a sufficient body of evidence that link specific approaches to actual on-the-ground results. The challenge presented to MTC is: How can the agency set performance criteria in a manner that meets its own ridership, livability, and cost-effectiveness goals, yet allow local jurisdictions the flexibility to address land use issues in their own way?

- A critical question facing MTC is: How to establish performance criteria for transit funding that meshes with current protocols and practices? In other words, can a program be established that is not unduly burdensome to local jurisdictions? A critical step for this effort will be to examine the protocol MTC presently uses for planning, designing, and funding new transit extensions and tying any new measures to these existing efforts. Linking this with other regional efforts, including BART's system expansion policy and VTA's initiatives, will also be important.

- One of the overriding questions is timing or what BART staff called "the logical trigger point." Transportation projects take years to develop with a series of decision points. How does MTC avoid requiring local communities to deliver transportation-related land uses before there is a firm commitment to fund the transportation facility? At what point does the agency seek firm land use commitments? Is it at a single point as the BART policy seems to suggest or at a variety of points similar to the FTA framework?

- FTA's New Starts Land Use Criteria demonstrate that it is not always necessary to require local changes in land use – an incentive-based system can be effective when changes in land use bestow a perceived advantage in receiving recommendations for limited funding. Local governments may choose to change land use in exchange for higher likelihood of receiving funding. However, if the purpose of MTC's policy is to establish readiness for allocation of regional funds to a guaranteed list of projects (Res. 3434), then incentives alone may not be strong enough to induce changes in local land use policies and practices.

- As mentioned above, the purpose and structure of the land use policy ought to be tightly tied to its ultimate use. So, for example, if MTC's goal is to set minimum expectations for local governments to provide supportive land use patterns prior to the allocation of funds, then perhaps a process-oriented or threshold-based system might be sufficient. If, however, the aim of the agency is to encourage communities to go beyond minimum requirements, then a combined threshold and rating system would reward those communities that do indeed exceed minimum requirements. MTC needs to answer this fundamental question early in the policy-setting process.

- The experience of TriMet's Westside MAX Light Rail opens interesting questions about the duration of land use commitments. TriMet's FFGA linked federal funding to land use commitments at the end of final design, but also included provisions to revisit the performance of those commitments five years after the system had opened for operation. Such a system of checks and balances could be useful for MTC to ensure that

local communities don't veer away from land use commitments once funds are allocated and construction is underway – but also raises questions about MTC's long-term commitment to monitoring performance.

- BART's System Expansion Policy helps raise the question of whether density and transit ridership are sufficient measures to link transit and land use. Where do the additional and important factors we know help deliver high performing transit-oriented development, such as parking, pedestrian design, street networks and local retail destinations, fit into the equation?

- The region's transportation interests are broader than those of any one specific transit agency, and include total transportation costs, impact on other transportation elements, and environmental impacts. MTC may wish to consider these additional factors in developing regional policies to supplement the traditional cost effectiveness measures used in transit analysis.

These questions and issues should be considered in the development of a regional policy approach to TOD.

FOOTNOTES

[i] http://www.atlantaregional.com/qualitygrowth/programsummary.html. viewed June 2004

[ii] See http://www.rtachicago.com/business/planning.asp for more information about RTAP publications.

[iii] An extensive description of this case study is provided in *The New Transit Town: Best Practices for Transit-Oriented Development*, Island Press, 2003.

[iv] Cambridge Systematic, Inc. *Summary Analysis of Transit Supportive Land Use for New Starts Projects: FY 2001 Annual Report on New Starts.* For the Federal Transit Administration. Washington, D.C. July 2000.

[v] Whoriskey, Peter. *Tysons Project Adds Dimension to Rail Proposal.* Washington Post, June 22, 2003.

[vi] Federal Transit Administration. *Guidelines and Standards for Assessing Transit-Supportive Land Use.* Office of Planning. Washington, D.C. August 2002.

[vii] Panel members were Maureen McAvey, Urban Land Institute; G.B. Arrington, Parsons Brinkerhoff; Robert Dunphy, Urban Land Institute; Reid Ewing, University of Maryland; Will Fleissig, Continuum Partners; Jeff Ordway, BART; Troy Russ, Glatting Jackson Kercher Anglin; and Gerry Tully, Proterra Companies.

[viii] This differs from the current FTA land use rating system, in that instead of rewarding station area plans and supporting codes as one of many factors in a rating process, their importance would be elevated to the point of a pass/fail requirement.

[ix] BART. *Attachment A System Expansion Criteria and Process.* PowerPoint, 2002

[x] Federal Transit Administration. *Westside Full Funding Grant Agreement Hillsboro Extension Agreement,* Washington, D.C. January 1995.

[xi] Arrington, G.B., *At Work in the Field of Dreams: Light Rail and Smart Growth in Portland,* Tri-Met, September 1998

[xii] Cervero, Robert and Parsons Brinckerhoff. *Transit Oriented Development in America: Experiences, Challenges, and Prospects.* Transportation Cooperative Research Program. Forthcoming publication 2004.

[xiii] Cervero, ibid.

[xiv] Cervero, Robert and Parsons Brinckerhoff. *Transit Oriented Development in America: Experiences, Challenges, and Prospects.* Transportation Cooperative Research Program. Forthcoming publication 2004.

[xv] Cervero, ibid.

[xvi] Cervero, Robert and Parsons Brinckerhoff. *Transit Oriented Development in America: Experiences, Challenges, and Prospects.* Transportation Cooperative Research Program. Forthcoming publication 2004.

[xvii] Cervero, ibid.